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REMARKS
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Claims 1-20 are currently pending in the subject application and are presently under consideration. Claims 1, 4, 8, 9, 10, 17, 19, and 20 have been amended as shown at pp. 2-6 of the Reply. Claims 2 and 5 have been canceled.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I.   **Rejection of Claims 1-5 and 7 Under 35 U.S.C. §102(e)**

Claims 1-5 and 7 stand rejected under 35 U.S.C. §102(e) as being anticipated by Sheldon *et al.* (US Patent App. No. 2003/0081125). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Sheldon *et al.* does not anticipate each and every element as set forth in the subject claims.

> A single prior art reference anticipates a patent claim only if it expressly or inherently describes each and every limitation set forth in the patent claim. *Trintec Industries, Inc. v. Top-U.S.A. Corp.*, 295 F.3d 1292, 63 USPQ2d 1597 (Fed. Cir. 2002); *See Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the ... claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

The claimed invention relates to a system and methodology to facilitate network diagnostics and self-healing of network connectivity problem(s). More particularly, independent claim 1 (and similarly independent claim 4) recites a protocol diagnostic system, comprising *a data stream monitor component...; and a diagnostics engine comprising at least one protocol state compressor..., and the data stream monitor component utilizes at least one lexical rule set associated with the at least one protocol state compressor to determine subsets of the raw network data to copy, the at least one lexical rule set stores at least one of information regarding structure of subsets of data and protocol specific information.* Sheldon *et al.* does not expressly or inherently disclose the aforementioned novel aspects of applicants' invention as recited in the subject claims.

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Sheldon *et al.* discloses a system and method for monitoring and diagnosis of video device performance in the transferring of audio visual data over a video network. A diagnostic node interfaces with a video network to receive audio visual data associated with one or more video devices of the video network. The diagnostic node operates as a transparent pass through/proxy for a video device or as a regular terminating route in order to evaluate audio visual data and determine performance statistics associated with a predetermined video device that is proximate the diagnostic node. (*See* page 1, paragraph [0008]).

Sheldon *et al.* does not disclose the use of a lexical rule set for determining subsets of the raw network data to copy, as presently recited in claims 1 and 4. The lexical rule set can store information regarding structure of subsets of data (*e.g.*, frames) the diagnostics engine desires the data stream monitor component to copy and provide to the protocol state compressors. The lexical rule set can also provide structural information to the data stream monitor component regarding protocols to be monitored. Accordingly, utilizing the lexical rule set, the data stream monitor component can determine which subsets of raw network data to copy and/or an amount of the raw network data to copy. For example, the lexical rule set associated with a particular protocol (*e.g.*, HTTP) can specify that only a portion of a data frame associated with the protocol be copied (*e.g.*, header information). (See pg. 7, line 5-pg. 8, line 20). In contrast, Sheldon *et al.* discloses a diagnostic node deployed as an H.323 protocol compliant terminating route or an H.323 protocol compliant pass through proxy so that audio visual data passed through the network is available to the diagnostic node without interfering with any on-going video calls. (*See* pg. 2, paragraph [0018]). Accordingly, Sheldon *et al.* is silent with regard to *the use of a lexical rule set to determine subsets of raw network data to copy, wherein the lexical rule set stores information regarding structure of subsets of data and protocol specific information.*

In view of at least the above, it is readily apparent that Sheldon *et al.* fails to expressly or inherently disclose applicants' claimed invention as recited in independent claims 1 and 4 (and claims 2-3, 5 and 7 which respectively depend there from). Accordingly, it is respectfully requested that these claims be deemed allowable.

II.   Rejection of Claim 6 Under 35 U.S.C. §103(a)

Claim 6 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Sheldon in view of Bereiter *et al.* (US Patent 6,357,017). It is respectfully submitted that this rejection

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should be withdrawn for the following reasons. Sheldon *et al.* and Bereiter *et al.*, individually or in combination, do not teach or suggest each and every element set forth in the subject claims. In particular, Bereiter *et al.* does not make up for the aforementioned deficiencies of Sheldon *et al.* with respect to independent claim 4 (which claim 6 depends from). Thus, the subject invention as recited in claim 6 is not obvious over the combination of Sheldon *et al.* and Bereiter *et al.*, and withdrawal of this rejection is requested.

III.   Rejection of Claims 8-14 and 19-20 Under 35 U.S.C. §103(a)

Claims 8-14 and 19-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Sheldon in view of Kerft *et al.* (US Patent 5,442,170). It is respectfully submitted that this rejection should be withdrawn for the following reasons. Sheldon *et al.* and Kerft *et al.*, individually or in combination, do not teach or suggest each and every element set forth in the subject claims.

> To reject claims in an application under §103, an examiner must show an unrebutted *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *See* MPEP §706.02(j). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicants' disclosure. *See In re Vaeck,* 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

As stated above, applicants' claimed invention relates to a system and methodology to facilitate network diagnostics and self-healing of network connectivity problem(s). More particularly, independent claim 8 (and similarly independent claims 13 and 19-20) recites a computer network diagnostic system, comprising *a data stream monitor/multiplex component that accesses real-time network data, selectively determines at least one subset of the real-time network data to multiplex based at least in part upon at least one lexical rule set; a data stream distribution engine that demultiplexes the multiplexed data based at least in part upon the at*

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least one lexical rule set; and, a diagnostics engine having a plurality of protocol state compressors, ... Sheldon *et al.* and Kerft *et al.*, individually or in combination, fail to teach or suggest such aspects of the claimed invention.

Sheldon *et al.* relates to a system and method for monitoring and diagnosis of video device performance in the transferring of audio visual data over a video network. A diagnostic node interfaces with a video network to receive audio visual data associated with one or more video devices of the video network. The diagnostic node operates as a transparent pass through/proxy for a video device or as a regular terminating route in order to evaluate audio visual data and determine performance statistics associated with a predetermined video device that is proximate the diagnostic node. (*See* page 1, paragraph [0008]). At Page 6 of the Office Action (dated January 12, 2006), the Examiner acknowledges that Sheldon *et al.* fails to disclose the multiplexing and de-multiplexing of copied raw data frames, as disclosed in the subject claims.

Kerft *et al.* does not make up for the aforementioned deficiencies of Sheldon *et al.* with respect to independent claims 8, 13 and 19-20 (which claims 9-12 and 14 respectively depend there from). Kerft *et al.* relates to a programmable cable adaptor that includes a housing containing an internal circuit board having a plurality of conductive traces, an input connector with multiple pins or pin-receiving sockets, and an output connector with multiple pins or pin-receiving sockets. On the circuit board, there is a card edge receptacle with key-contacting pins electrically connected to the conductive traces which in turn electrically couple the receptacle pins to the input connector and/or the output connector. The key-contacting pins of the card edge receptacle are arrayed along at least one side of an elongated aperture for receiving an adaptor programming key generally referred to as a card edge key. The "key" is typically a small printed circuit board with conductive tabs on at least one side thereof with at least one tab being electrically connected to at least one other tab on the key by conductive traces. When the key is inserted into the receptacle aperture, electrical connections are made between the pins/sockets of the input connector and the pins/sockets of the output connector via the tabs and circuit traces on the key. (*See* col. 2, lines 36-57).

As stated above, teachings of references can be combined *only* if there is some suggestion or incentive to do so. Here, neither the nature of the problem to be solved, the teachings in the cited art, nor the knowledge of persons of ordinary skill provide sufficient suggestion or

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motivation to combine the references. In fact, Kerft *et al.* teaches away from the addition of a multiplexer in diagnostic equipment. Specifically, Kerft *et al.* discloses that standard automobile computers use different types of pin assignments for signals from one type of computer system to another automotive vehicle or for each computer on board the vehicle. Because of the variations in the configuration of pin assignments, it is sometimes difficult or confusing to use diagnostic equipment to properly recognize and process signals. One solution was to provide a multiplexer within the diagnostic equipment to configure the signal paths. However, the problem with this solution is that such method increases the complexity and cost of the diagnostic equipment, since every possible combination of signal routine must be accounted for. (*See* col. 2, lines 3-11).

Accordingly, one of ordinary skill in the art would not have been motivated by Kerft *et al.* to employ a multiplexer in the diagnostic equipment of Sheldon *et al.* as Kerft *et al.* teaches away from the addition of a multiplexer due to the increase in complexity and cost of the diagnostic equipment the multiplexer adds. Thus, the contention that the modification of the diagnostic system of Sheldon *et al.* to include a multiplexer, would have been obvious in view of the teachings of Sheldon *et al.* and Kerft *et al.* constitutes nothing more than hindsight speculation.

Moreoever, the combination of Sheldon *et al.* and Kerft *et al.* does not teach the claimed invention. Specifically, utilizing a multiplexer in a video diagnostic system does not read on the presently claimed diagnostic system, comprising *a data stream monitor/multiplex component that accesses real-time network data and selectively determines at least one subset of the real-time network data to multiplex based in part upon a lexical rule set and a data stream distribution engine that demultiplexes the multiplexed data based in part upon the lexical rule set.* As stated *supra*, Sheldon *et al.* does not disclose the use of a lexical rule set to determine subsets of real-time network data to copy. Accordingly, the combination of Sheldon *et al.* and Kerft *et al.*, i.e., the addition of a multiplexer to a diagnostic system, does not render the presently claimed invention obvious.

In view of the aforementioned deficiencies of Sheldon *et al.* and Kerft *et al.*, and because the requisite teaching or suggestion to combine the elements in the manner suggested is absent from the cited references, it is respectfully submitted that this rejection be withdrawn with

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respect to independent claims 8, 13 and 19-20 (which claims 9-12 and 14 depend respectively there from).

IV.   Rejection of Claim 16 Under 35 U.S.C. §103(a)

Claim 16 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Sheldon in view of Kerft *et al.*, and further in view of Korkosz *et al.* (US Patent 6,781,513). It is respectfully submitted that this rejection should be withdrawn for the following reasons. Sheldon *et al.*, Kerft *et al.* and Korkosz *et al.*, individually or in combination, do not teach or suggest each and every element set forth in the subject claims. In particular, Korkosz *et al.* does not make up for the aforementioned deficiencies of Sheldon *et al.* and Kerft *et al.* with respect to independent claim 13 (which claim 16 depends from). Thus, the subject invention as recited in claim 16 is not obvious over the combination of Sheldon *et al.*, Kerft *et al.* and Korkosz *et al.*, and withdrawal of this rejection is requested.

V.   Rejection of Claims 17-18 Under 35 U.S.C. §103(a)

Claims 17-18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Korkosz *et al.* in view of Morgan *et al.* (US Patent App. No. 2002/0144187). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. The rejection over Morgan *et al.* is not a valid rejection under 35 U.S.C. §103(a). The invention of the reference (Morgan *et al.* (US Patent App. No. 2002/0144187)) was subject to an obligation of assignment to the assignee (Microsoft Corporation) of the present application at the time of filing. Therefore, a rejection under 35 U.S.C. §103(a) would not be proper pursuant to 35 U.S.C. §103(c) since the reference qualifies as prior art only under 35 U.S.C. §102(e). Furthermore, the Examiner has not alleged that Korkosz *et al.* alone can support the rejection. Accordingly, it is respectfully requested that this rejection should be withdrawn.

VI.   Rejection of Claim 15 Under 35 U.S.C. §103(a)

Claim 15 stands rejected under 35 U.S.C. §103(a) as being unpatentable over Sheldon in view of Kerft ct al, and further in view of Korkosz et al, and further in view of Morgan *et al.* It is respectfully submitted that this rejection should be withdrawn for the following reasons. Sheldon *et al.*, Kerft *et al.*, Korkosz *et al.* and Morgan *et al.*, individually or in combination, do

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not teach or suggest each and every element set forth in the subject claims. In particular, Morgan *et al.* does not make up for the aforementioned deficiencies of Sheldon *et al.*, Kerft *et al.* and Korkosz *et al.* with respect to independent claim 13 (which claim 15 depends from). Thus, the subject invention as recited in claim 15 is not obvious over the combination of Sheldon *et al.*, Kerft *et al.*, Korkosz *et al.* and Morgan *et al.*, and withdrawal of this rejection is requested.

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP300US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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